DOCUMENT RESUME

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ABSTRACT

Presented is a list of audiovisual aids and written materials related to careers in science and engineering, with special emphasis on the involvement of minority students in technical careers. Each item is briefly described (if the material is a film, its length and whether color or black and white is included), the cost (if any) of the material is given, as is ordering information and the complete address for the source of the material. Resources are grouped as audio-visual materials, written materials, and special materials. The special materials consist of an exhibit publicizing the minority engineering effort. (PB)

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ENGINEERING— A WORLD OF POSSIBILITIES

A List of Audio Visual Aids and Written Materials

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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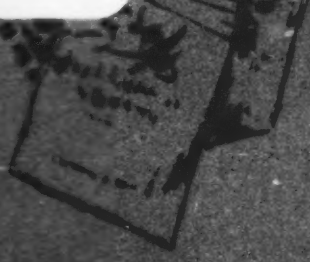

SE 027 735

COMMITTEE ON MINORITIES IN ENGINEERING
NATIONAL RESEARCH COUNCIL

Audio Visual Materials

A Measure of Time

A 27 minute film depicting the engineering and scientific accomplishments of the Aztecs and Mayans as they apply to modern-day engineering and applied sciences. The film includes interviews and on-the-job shots of practicing scientists in industry, government, and university laboratories. Chicano poetry and appropriate music composed for the film help to convey its message.

Cost: $340.00

Norma Rossetti
Bilingual Cine - Television
2940 16th Street
Room 104
San Francisco, CA 94103

A Piece of the Action

An 18 minute, color film starring Ben Vereen (*Roots*) and Stephanie Mills (*The Wiz*) which encourages minority high school students to pursue an engineering career.

Cost: $150 (new copies)

Also available on a 10-day loan basis. Borrower must pay postage and handling costs.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

A World for Women in Engineering

A three-part program consisting of a 20 minute color film, two student booklets, a leader's guide for the teacher or counselor, and a speakers bureau list composed of women engineers from the Bell System.

Cost: Free

Elizabeth J. Baxter
American Telephone & Telegraph Co.
Room 3355C3
295 N. Maple Avenue
Basking Ridge, NJ 07920

Beginnings

A 13½ minute, 16 mm. color film emphasizing the career opportunities that are available in the civil engineering profession.

Cost: $135.00. Can be loaned free of charge.

Herbert Hands
American Society of Civil Engineers
345 East 47th Street
New York, NY 10017

Careers in Engineering

A 14 minute, 16 mm. color and sound film designed for junior and senior high school students interested in engineering.

Cost: $200.00

Sally Goerg
Glenville Film Center
705 Corporation Park
Scotia, NY 12302

Chemical Engineering

A 25 minute slide/tape program available on chemical engineering for high school students.

Cost: Rental—$5.00

Sylvia Fourdrinier
American Institute of Chemical Engineers
345 East 47th Street
New York, NY 10017

Chemical Engineering: The Everyday Challenge

A 13 minute slide/cassette presentation which describes the profession and features conversations with five Black, Hispanic, and women engineers who explain why they enjoy engineering. The presentation is targeted for high school seniors and engineering freshmen but should also be of interest to parents.

Cost: $50.00

Chemical Industry for Minorities in Engineering (ChIME)
c/o Robert C. Thompson
Manager, Personnel Research
Olin Corporation
120 Long Ridge Road
Stamford, CT 06904

Conceive It, Believe It, Achieve It

A 28 minute color film presentation based on the 1976 Chicago High School Science Fair. It demonstrates the important role that parents, teachers, and counselors play in helping to prepare minority youngsters for technical careers.

Cost: Available free on a ten-day loan basis to institutions and organizations.

Robbie Smith
Corporate Social Policy
Standard Oil Company (Indiana)
200 East Randolph Drive
Chicago, IL 60601

County Accented Minority Engineering Recruitment Action (CAMERA)

A 23 minute, ¾ inch TV cassette tape featuring Minority Introduction to Engineering (MITE) and Southeastern Consortium for Minorities in Engineering (SECME) students involved in special career exploration projects at North Carolina State University. The tape is narrated by a faculty member accompanied by a female or minority engineering student and a professional engineer.

Cost: Free with 1 blank regular cassette for the purpose of dubbing the material.

Byard Houck
Director of Engineering Awareness Program
North Carolina State University
119 Riddick Hall
Raleigh, NC 27650

Designing The Future

Materials stress the need for American Indian engineers. Kit includes a filmstrip and a booklet detailing past achievements, present needs, and a look at the future.

Cost: Not yet determined. *These materials will be available September 1979.*

Elizabeth J. Baxter
American Telephone & Telegraph Co.
Room 3355C3
295 N. Maple Avenue
Basking Ridge, NJ 07920

Engineering Education and Career Opportunities

A 22¼, ¾ inch color TV cassette tape describing the fields of engineering, the functions of an engineer, the characteristics of an engineer, and four summer programs.

Cost: $50.00. Make checks or money orders payable to NCSU.

J. Parks Newby
Industrial Extension Service
P.O. Box 5506
North Carolina State University
Raleigh, NC 27650

Engineering—The Challenge of the Future

This film uses interviews with students, teachers, and industrialists to present the story of engineering. 25 minutes.

Cost: $125 00

Illinois Bell Telephone Company
225 West Randolph Street
Room 9G
Chicago, IL 60606

Engineering Makes a World of Difference

Rock musical background, no narration. The message is made through scenes showing the work and products of engineering.

Cost: $150.00 to purchase, or can be rented for $5.00 for the first two weeks and $5.00 each week thereafter.

Engineers' Foundation of Kansas
216 West Seventh
Topeka, KS 66603

Engineering—What's It All About?

This filmstrip and cassette, developed for AT&T for junior and senior high school students, is accompanied by an eight page color booklet designed to motivate minorities to explore engineering careers.

Twelve motivational posters (starring the comic strip character "Luther"), a 16-page booklet for parents, a ditto master for a self-administered interest/aptitude test, and a leader's guide are currently being developed. These materials are

geared to junior high school students.
Cost: Booklet, 18¢ each in packages of 100
Filmstrip and cassette, $9.95

LSR Learning Associates, Inc.
278 Haypath Road
Old Bethpage, NY 11804

Investment in Business Leadership

A nine-minute videotape which outlines the need for and the progress of The National Fund For Minority Engineering Students (NFMES) through interviews with NFMES Scholars, H. Barclay Morley, Chief Executive Officer of Stauffer Chemical Company, and William Schutz, Associate Dean at Georgia Institute of Technology.
Cost: Free

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 3105
New York, NY 10017

Is Engineering for You?

A 10 minute, 35 mm. slide/tape presentation for junior high students.
Cost: $35.00

Edward T. Misiaszek
Associate Dean of Engineering
Clarkson College
Potsdam, NY 13676

It's Excitement, It's Adventure, It's Engineering

This 20 minute, 16 mm. color film, produced by the Public Utilities Association of the Virginias, features young minority engineers at work.
Cost: $287.50 (If purchased).
Also available on a loan basis.

Donald Jones
Public Utilities Association of the Virginias
602 First Federal Building
Roanoke, VA 24011

It's Your Turn

A series of 15 minute color films tracing the advance of technology in America which tells young people "it's your turn" to create better solutions to some of today's leading problems. The titles in the series are:

It's Your Turn
It's Your Turn to Steer
It's Your Turn to Communicate
A Talk with Wernher von Braun
A Promise of Space—Fulfilled

Cost: $185.00 for each film in the series.

Frank Maniglia
3516 Incorporated
3259 Prospect Street, N.W.
Washington, DC 20007
337-0707

Joe Ogg - The First Industrial Engineer

A 16 minute, 16 mm. color and sound cartoon film designed for junior high school students introduces Joe Ogg, a "prehistoric" character who develops a production assembly line system by employing industrial engineering concepts—from clubs, to arrows, to a factory to process the results of the hunt.

Cost: $110.00 - Corporations
$90.00 - Member price: (universities, junior and senior high schools)
$20.00 - Rental fee for 1st day
$10.00 - Each additional day

Notification: 10 days prior to showing date

The American Institute of Industrial Engineers
Publication Sales
25 Technology Park/Atlanta
Norcross, GA 30092

Nothing But Common Sense

A film which interviews Black engineering college students and role models about the benefits of an engineering career for minorities. The film is targeted to Black high school and junior college audiences.

Cost: $125.00
Rental: $2.50 and return costs

Engineers' Council for Professional Development
Publications Department
345 East 47th Street
New York, NY 10017

SCOPES

This 10 minute, 35 mm. slide/tape presentation for sophomore, junior, and senior high school level students describes the Summer Orientation Program in Engineering (SCOPES) at Clarkson College.

Cost: $35.00

Edward T. Misiaszek
Associate Dean of Engineering
Clarkson College
Postdam, NY 13676

Solving Problems: Engineers at Work

Kit includes a filmstrip, article cards showing engineers at work, project cards (simple to more difficult), and discussion/role play cards. Engineers pictured will be predominantly women and minorities. Geared to junior high school students.

Cost: Not yet determined. *These materials will be available September 1979.*

Elizabeth J. Baxter
American Telephone & Telegraph Co.
Room 3355C3
295 N. Maple Avenue
Basking Ridge, NJ 07920

They Did It So Can You

A 15 minute color filmstrip featuring four role model engineers—a Black, Mexican-American, Puerto Rican, and American Indian who tell students how they made it to the top in the engineering profession. Included with the synchronized sound cassette are a teacher's guide and a student activity section on spirit masters. The materials are suitable for grades 6-12.

Cost: Nonprofit organizations, $7.95 for the filmstrip version and $14.95 for the slide version, plus postage and handling.

All others $25.00, plus postage and handling.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

Viva. A Salute to Hispanic Americans in Science and Engineering

A 30 minute slide/cassette presentation of the contributions of Hispanic engineers and scientists.

Cost: Slides and Cassette, $136.00.

Domingo Nick Reyes & Associates
P.O. Box 15096
Engleside Branch
Alexandria, VA 22309

You—An Engineer

A slide presentation, approximately five minutes in length, that encourages members of minority groups, including women, to enter the engineering field.

Cost: $16.00 to purchase slides, script, and flyers.

Edward S. Poole
Assistant Vice President
Affirmative Action Program
GTE Service Corporation
One Stamford Forum
Stamford, CT 06904

You Can Get There From Here

A 25 minute color video cassette prepared by the University of Texas for the Texas Alliance for Minorities in Engineering (TAME). It features young minority engineers who describe their college preparation.

Cost: $45.00 to purchase
Rental free.

John S. Robottom
Executive Director
Texas Alliance for Minorities in Engineering (TAME)
College of Engineering
Cockrell Hall
University of Texas at Austin
Austin, TX 78712

Women in Science

Audiotaped interviews with six women scientists. The tapes are accompanied by thirty-three 35 mm. slides and an article about each scientist. Appropriate for guidance counselors and science teachers.

Cost: $27.50 (no discount).

National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

Written Materials

American Black Scientists and Inventors

Motivational stories about twelve Black scientists and inventors who made great, but in some cases little-known, contributions to science and technology in the United States.

Cost: $2.50. Stock number 471-14690.

National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

A Profile of the Woman Engineer

This booklet, prepared by the Statistics and Publications Committees of the Society of Women Engineers, is based on data obtained by surveying a large sample of women engineers in the fall of 1978.

Cost: 1 copy free

Society of Women Engineers
United Engineering Center
345 East 47th Street
New York, NY 10017

Be A Real Pro

A pamphlet describing various kinds of engineers and what they do.

Cost: No charge

Robbie Smith
Corporate Social Policy
Standard Oil Company (Indiana)
200 East Randolph Drive
Chicago, IL. 60680

Black Americans in Science and Engineering

Profiles of 27 Black Americans who made significant contributions to science and engineering. For junior and senior high school students.

Cost: No charge for limited quantities.

E. J. Clark
Manager, Educational Communication Programs
General Electric Company
3135 Easton Turnpike
Fairfield, CT 06431

Black Contributors to Science and Energy Technology

Booklet profiles the contributions of 24 Black scientists and inventors who have made contributions to American science and technology, particularly in the areas of energy development and usage.

Cost: Free

U.S. Department of Energy
Office of Public Affairs
Washington, DC 20585

The Black Inventors Latimer and Woods

Booklet chronicles the lives of Lewis Latimer and Granville Woods, two early Black inventors and engineers. Booklet is suitable for grades 5-12.

Cost: 25¢. There is a 20% discount for bulk orders of 25 copies or more.

Fitzgerald Publishing Co., Inc.
527 Madison Avenue
New York, NY 10022

Choices, Decisions, Actions

A teacher's guide to prepare students in grades 6-9 for careers in science-related professions.

Cost: Free

Robbie Smith
Corporate Social Policy
Standard Oil Company (Indiana)
200 East Randolph Drive
Chicago, IL 60601

Designing the Future

Materials stress the need for American Indian engineers. Kit includes a filmstrip and a booklet detailing past achievements, present needs, and a look at the future.

Cost: Not yet determined. *These materials will be available September 1979.*

Elizabeth J. Baxter
American Telephone & Telegraph Co.
Room 3355C3
295 N. Maple Avenue
Basking Ridge, NJ 07920

Educators Guide

Designed to accompany the film *A Piece of the Action* for teachers and others using the film. Can be used on its own as a source guide.

Cost: $1.50. Individual requests for single copies of publications will be honored at no charge. A discount of 15% is given for orders of 50 to 99 copies, 20% for orders of 100 or more copies for academic institutions and precollege engineering programs. Postage and handling charges are added after the discount is determined.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

Engineering—A Future

A career guide for parents, teachers, and counselors of younger students which describes the work of engineers, the preparation needed for an engineering education, and lists suggestions about how parents and advisors can help. The guide also contains a list of current pre-college programs for minority students interested in science and engineering.

Cost: 50¢ plus postage and handling.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

Engineering Their Education

Pamphlet describing how to increase the enrollment of minority engineering students and assure the successful completion of their undergraduate work.

Cost: Free

Robbie Smith
Corporate Social Policy
Standard Oil Company (Indiana)
200 East Randolph Drive
Chicago, IL 60601

The Financial Catalyst for Minorities in Engineering

A concise description of the goals and objectives of The National Fund For Minority Engineering Students.

Cost: Free

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 3105
New York, NY 10017

For Engineers, The Future Is Now

A reprint of an interview with J. Stanford Smith, Chairman of International Paper Company and former Chairman of The Fund For Minority Engineering Students, from *Black Enterprise Magazine*. The interview presents a history and overview of the minority engineering effort.

Cost: Free

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 3105
New York, NY 10017

Going Right On

Information and advice for minority students who want to continue their education after high school.

Cost: $6.00. Must be bought in quantities of 50.

Publication Orders Service
College Board
Box 2815
Princeton, NJ 08541

Hispanic Women on the Move

A 52 page book which highlights the contributions of Hispanic American women to the life and history of the United States. Book includes discussion of women in non-traditional roles such as engineers, scientists, and inventors. Book also contains many photographs and illustrations.

Cost: $3.00. Bulk order discount available.

Domingo Nick Reyes & Associates
P.O. Box 15096
Engleside Branch
Alexandria, VA 22309

The JETS Program

A pamphlet briefly describing the Junior Engineering Technical Society (JETS), its goals and purposes.

Cost: Free

The Junior Engineering Technical Society
345 East 47th Street
New York, NY 10017

Leaders Guide

This six-page booklet developed by AT&T is an aid to the teacher or counselor which lists available films and filmstrips regarding minorities in engineering, explains the programs, and includes a bibliography.

Cost: 40¢

Robert Weisz
Liberty-York Graphic Industries, Inc.
99 Hudson Street
New York, NY 10013

Making It In Engineering

Booklet featuring five members of minority groups who describe how they made the engineering profession a personally rewarding career.

Cost: 35¢; 10% discount on orders of 50 copies or more, plus postage and handling. Order number EC73.

Engineers' Council for Professional Development
Publications Department
345 East 47th Street
New York, NY 10017

ME^3 Is

A pamphlet briefly describing the Minority Engineering Education Effort (ME^3), its services and purpose.

Cost: Free

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

ME^3 Special Engineering Report

A listing of engineering programs in colleges and universities across the nation accredited by the Engineers' Council for Professional Development which have expressed an interest in minority recruitment. Also included in the report are the types of financial aid provided by the individual colleges, supportive services offered, and the current minority and total enrollment.

Cost: $1.00 plus postage and handling.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

Minority Engineers in the Chemical Industry

A career selection guide developed by the Manufacturing Chemists Association which describes employment opportunities in the chemical industry through the stories of 10 minority engineers. Pictures accompany text.

Cost: Free. Must pay postage and handling.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

Minorities in Engineering

A descriptive brochure on engineering with an emphasis on motivation, pre-college preparation and planning. Included are descriptions of the various fields of engineering, current starting salaries, as well as alternative uses of an engineering degree.

Cost: 50¢ plus postage and handling.

Minority Engineering Education Effort (ME^3)
345 East 47th Street
New York, NY 10017

Minorities in Engineering

A reprinted article and interview with Edward R. Kane, President of Du Pont, and Vernon E. Jordan, President of the National Urban League, from Du Pont's *Context.*

Cost: Free

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 3105
New York, NY 10017

Minorities in Engineering: A Blueprint for Action

Summary and principal recommendations of the Sloan Task Force.

Cost: $1.50 prepaid

The American Society for Engineering Education
Suite 400
#1 Dupont Circle, N.W.
Washington, DC 20036

Minorities in Engineering Booklet for High School Students

A 17-page booklet developed by AT&T containing pictures of engineering products, engineers at work, and a brief list of college requirements for the engineering profession.

Cost: 26¢

Robert Weisz
Liberty-York Graphic Industries, Inc.
99 Hudson Street
New York, NY 10013

Minorities in Engineering: A Five-Year Progress Report

An article by J. Stanford Smith, Chairman of International Paper Company and former Chairman of The National Fund For Minority Engineering Students, reprinted by permission from the November 1977 issue of *Engineering Education.*

Cost: Free.

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 3105
New York, NY 10017

The National Fund For Minority Engineering Students

A four-year report on the progress of the program to help assure qualified minority engineers for professional and managerial leadership positions in American industry.

Cost: Free

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 3105
New York, NY 10017

NCCCD Curriculum Materials

The National Coordinating Center for Curriculum Development (NCCCD) has designed 18 curriculum modules in algebra, geometry, general science, biology, communications, and guidance to stimulate student awareness in engineering as a career option and provide students with experience in solving engineering related problems. The materials are for classroom and/or club use.

Cost: For the 1979-1980 school year these materials are available at no cost to schools with high minority student populations. NCCCD requests, however, that persons using the materials inform them of the teacher and student response to them. Resource manuals are also available for teachers.

Emil J. Piel
Executive Director
National Coordinating Center for
Curriculum Development
Department of Technology and Society
College of Engineering and Applied Science
State University of New York
Stony Brook, NY 11794

Seven Reasons A Student Should Consider Studying Engineering

A one page list of the seven reasons.

Cost: No charge for a single copy.

Engineering Coordinator
Department of Industrial and Technical
Education
Central State University
Wilberforce, OH 45384

Science and Engineering Newsletter

Monthly science and engineering publication designed for gifted Black students in grades 4-8.

Cost: Individual subscriptions free to students grades 4-8, upon request. All others: $15.00/yearly subscription. Requests for bulk order subscriptions should be directed to the Editor.

Jean W. Hill, Editor
Science and Engineering Newsletter
National Consortium for Black Professional
Development
1359 S. 3rd Street
Louisville, KY 40208

Science Career Exploration for Women

Aimed at science teachers, counselors, and others who work with young women. This book contains activity modules designed to assist talented women students explore science-related professional careers which require university training and in which women have been historically underrepresented. The modules are highly adaptable and can be used separately or as a package with varying degrees of guidance.

Cost: $2.50. Stock number 471-14748.

National Science Teachers Association
1742 Connecticut Avenue, N.W.
Washington, DC 20009

Solving Problems: Engineers at Work

Kit includes a filmstrip, article cards showing engineers at work, project cards (simple to more difficult), and discussion/role play cards. Engineers pictured will be predominantly women and minorities. Geared to junior high school students.

Cost: Not yet determined. *These materials will be available September 1979.*

Elizabeth J. Baxter
American Telephone & Telegraph Co.
Room 3355C3
295 N. Maple Avenue
Basking Ridge, NJ 07920

Take It From Us . . . You Can Be An Engineer

Pamphlet oriented to high school students explaining engineering as a career.

Cost: No charge for limited quantities.

E. J. Clark
Manager, Educational Communication Programs
General Electric Company
3135 Easton Turnpike
Fairfield, CT 06431

Viva. A Salute to Hispanic Americans in Science and Engineering

A 52 page book that includes biographies and descriptions of the contributions of Hispanic engineers and scientists. Book also contains many photographs and illustrations.

Cost: $3.00; bulk order discount available.

Domingo Nick Reyes & Associates
P.O. Box 15096
Engleside Branch
Alexandria, VA 22309

What's it Like To Be An Engineer?

One in a series of career education booklets that presents a comprehensive description of engineering and includes photos of engineers at work. Oriented to high school students' interests.

Cost: No charge for limited quantities.

E. J. Clark
Manager, Educational Communication Programs
General Electric Company
3135 Easton Turnpike
Fairfield, CT 06431

What's It Like To Be A Technician?

Pamphlet oriented to high school students with a comprehensive description of what a technician does.

Cost: No charge for limited quantities.

E. J. Clark
Manager, Educational Communication Programs
General Electric Company
3135 Easton Turnpike
Fairfield, CT 06431

Womengineer

Booklet describes engineering as a career for women.

Cost: 35¢. Order number EC72.

Engineers' Council for Professional Development
Publications Department
345 East 47th Street
New York, NY 10017

Women in Engineering at Kodak

Booklet designed to present a realistic understanding of the engineering profession as it is practiced by five engineers at Eastman Kodak Company.

Cost: No charge for limited quantities.

Eastman Kodak Company
Corporate Communications
Rochester, NY 14650

Special Materials

Communicating Opportunities for Minorities in Engineering

An exhibit of nine 3' x 4' interchangeable panels which illustrates how corporations and organizations of the National Advisory Council on Minorities in Engineering are publicizing the minority engineering effort. The exhibit includes representative publications, films, slide shows, and a recorded commercial.

Cost: Shipping and handling charges.

The National Fund For Minority Engineering Students
220 East 42nd Street
Suite 310E
New York, NY 10017

Additional information concerning available written and audio visual materials should be sent to:

Committee on Minorities in Engineering
National Research Council
2101 Constitution Avenue, N.W.
Washington, DC 20418